

In the Claims:

1. (Currently amended) A cup-shaped drill head having an axis with a leading end and a trailing end and an inner space extending axially from the trailing end toward the leading end with an inner axially extending conical surface (2) extending from the trailing end for force-locking connection to an outer axially extending conical surface (3) of a driving drill shank (4), said drill head, said inner space having a cup base (5) having a variable curvature (K) with a center point (P) on said drill head axis adjacent said leading end and extending toward said inner conical surface (2), wherein at said cup base side the transition from said cup base in transition from said cup base (5) to said inner conical surface (2) the curvature (K) is smaller than the curvature at the center point (P).
2. (Original) A cup-shaped drill head, as set forth in claim 1, wherein said space has an inner cylindrical surface (6) extending axially from said cup base to said inner conical surface (2).
3. (Currently amended) A cup-shaped drill head, as set forth in claim 2, wherein the transition from said cup base (5) to at least one of said inner conical surface (2) and ~~the~~ an inner cylindrical surface (6) is mathematically smooth.
4. (Original) A cup-shaped drill head, as set forth in claim 1, wherein said cup base (5) has at least three uniformly increasing curvatures (K) differing in